State of Delaware
Water Infrastructure Advisory Council
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Minutes of the 136th Meeting

February 15, 2017

The Water Infrastructure Advisory Council held a public meeting on Wednesday, February 15, 2017 at 9:00 a.m., at Kent County Administrative Complex, 555 S. Bay Road, Conference Room 220, Dover, Delaware.

MEMBERS PRESENT:
Jeffrey Bross, Chairman-left at 9:49am
Hans Medlarz, Vice-Chair
Jeffrey Flynn-Arrived at 9:19am
Richard Duncan
Charles Anderson
Dave Baker
Bruce W. Jones-left at 10:35am
Eugene Dvornick
Michael Harmer

MEMBERS ABSENT:
Andy Burger
Jen Adkins
Lt. Col Douglas D. Riley

OTHERS PRESENT WERE:
Terry Deputy, Environmental Finance
Greg Pope, Environmental Finance
Laura Rafferty, Environmental Finance
Davison Mwale, Environmental Finance
Robert C. Burns, Environmental Finance
Keith Kooker, Environmental Finance
Reza Moqtaderi, Environmental Finance
Robert Zimmerman, DNREC
Michael Bott, DNREC
Dave Schepens, DNREC
Jim Sullivan, DNREC
Keith Mensch, DPH ODW
Doug Lodge, DHSS/DPH
Heather Warren, DHSS/DPH
Judy Schwartz, GMB

Jim Hoageson, GMB
Jason Loar, DBF
Aaron Goller, DBF
David Athey, AECOM
Chris Brendza, JMT
Jeremy Kalmbacher, Tidewater Utilities
Dan Barbato, Pennoni
June Andres, RVB
Charles Chiu, Duffield
Andrew Jakubowitch, Kent County Public Works
David Spacht, Artesian Water
Mike Gilbert, WRA
Douglas Janiec, Sovereign Consulting
Laura Wisler, Senator Carper's Office
Maddy Lauria, Cape Gazette
James Foskey, Town of Laurel
Kristy Rogers, Town of Milton
Marty Presley, Town of Frankford
Ryan Jaeger, Municipal Services Commission-City of New Castle
Jay Guyer, Municipal Services Commission-City of New Castle

CALL TO ORDER PUBLIC MEETING:

Meeting came to order at 9:00am.

APPROVAL OF THE AGENDA:

Motion made by Mr. Duncan, seconded by Mr. Dvornick to approve the agenda. Motion carried unanimously.

APPROVAL OF MINUTES –Public Meeting December 7, 2016:

Motion made by Mr. Anderson, seconded by Mr. Harmer to approve the December 7, 2016 public meeting minutes. Motion carried unanimously.

WIAC-INFORMATIONAL:

Jay Guyer who is the Water Supervisor from the City of New Castle's Municipal Services Commission (MSC) presented the following:

Drinking Water Innovation and Technology Grant Presentation

MSC is an agency of the City of New Castle. It was chartered in 1921 as the Board of Water & Light Commission by combining two water companies serving the city. It was amended in 1999 to be the Municipal Services Commission.

Distribution System:

- 30 Miles of Distribution Main – 6", 8", 12", 16"
- Approximately 80% Cast Iron Pipe and 20% Ductile Iron Pipe
- Approximately 60% of our Cast Iron Pipe dates back to the mid to late 1800's (Determined through excavation and inspection)
- Little information available about the Cast Iron Mains – Installation Date, Type, Pressure Class

MSC Water Infrastructure Capital Projects:

- 2005 to 2011 - Completed Capital Improvement program for Wells, Tanks, and Treatment Facility
- Started Developing a Capital Improvement program for our buried infrastructure
- Completed GIS Mapping of all Water System Assets
- Recognized there was no significant break history in one geographical location

MSC Water Main Assessment Renewal vs. Replacement Program:

- Completed our first water main relining project in 2011 – approximately 6,500 feet of 1950's 6", 8", and 12" Cast Iron Pipe
- Pipe was cleaned and lined with cement mortar for water quality issues
- Cement mortar lining adds no structural enhancement to the pipe
- Concern about the structural integrity of the main – cleaning / lining vs. replacement

MSC Water Main Assessment Pipe Testing and Analysis:

- Started researching options for pipe testing
- Discovered limited options are available for testing the integrity of existing mains
- The most common option is invasive testing which involves a water outage, excavating, removing a section of pipe, and lab testing (Charpy Penduilum, Tensile Strength Test and Microstructure Analysis)
- Expensive and only tests a small section of pipe

MSC Water Main Assessment Echologics, LLC.:

- 2014 American Water Works Association Conference – Learned of Echologics, LLC which is a business affiliate of Mueller Water Products
- Researched Echologics and found they were partnered with several large water utilities – New Jersey American Water and Aqua PA
- Echologics utilizes a non-invasive based technology for conducting assessments of buried pipe lines
- ePulse ® Condition Assessment and EchoWave ® Leak Detection - utilizes advanced correlator acoustic technology for performing pipeline assessment and leak detection

Partnering with Echologics:

- MSC worked with Echologics to develop a Scope of Work for assessing up to 2 miles of mid to late 1800's 6", 8", and 12" Cast Iron Water Mains, some in critical areas of the City
- Echologics worked with MSC to facilitate application for the Water Innovation and Technology Grant
- MSC worked with Heather Warren to secure the Water Innovation and Technology Grant to bring this technology to Delaware

Preparation for Echologics:

- MSC provided Echologics with detailed maps of the distribution mains and valves to be tested
- MSC researched all available information related to the mains to be tested – install date, pipe class, pressure type, etc.
- Pipe coupons from the last 20 years were examined and used to develop base pipe data
- Referenced 1927 Hand Book of Cast Iron Pipe published by the Cast Iron Pipe Research Association
- Field inspected and confirmed all main valves were clear and accessible for testing
- Communicated to local Schools Science, Technology, Engineering, and Math programs, local water utilities, and engineering firms
- Conducted a pre field survey meeting with Echologics to confirm preparations

Echologics Field Work:

- Echologics completed their field work between October 13 and October 15, 2015
- 28 pipe segments totaling 10,841 feet of water main was surveyed and tested
- On October 14th approximately 25 students from the local High School STEM program participated in the field survey work for approximately 3 hours
- On October 15th approximately 30 representatives from engineering firms, local towns, and other utilities participated in the field survey work for approximately 3 hours
- Field work was completed on October 15th
- Pipe tapping coupons were examined and analyzed by Echologics Representatives to verify ePulse ® Condition results

Summary of Key Results:

- EchoWave® Leak detection: No leaks were discovered at the time of the survey
- ePulse ® Condition Assessment: The 4 Pipe Class Assumptions used in the assessment were A, B, C, and D
- Class B and C most closely matched our tap coupon wall thickness and were used for this assessment
- ePulse ® Condition Assessment:
- Class B Assumption – Wall thickness of .43 to .57
  - 6 segments appear to be in good condition with less then a 10% loss in original wall thickness
  - 9 segments appear to be in moderate condition with 10% to 30% loss in original wall thickness
  - 12 segments appear to be in poor condition with over 30% loss in original wall thickness
- ePulse ® Condition Assessment:
- Class C Assumption – Wall thickness of .49 to .69
  - 0 segments appear to be in good condition with less then a 10% loss in original wall thickness
  - 10 segments appear to be in moderate condition with 10% to 30% loss in original wall thickness
  - 17 segments appear to be in poor condition with over 30% loss in original wall thickness
- EchoLife® Remaining Service Life Analysis:
- 0.244 Breaks per Mile per Year Assumption (American Water Works Association Research Foundation Target)
  - 15 Segments were estimated to have exceeded their remaining service life
  - 2 Segments were estimated to have between 1 and 9 years of remaining service life
  - 1 segment was estimated to have between 10 and 19 years of remaining service life
- EchoLife® Remaining Service Life Analysis (Continued):
  - 2 Segments were estimated to have between 20 and 29 years of remaining service life
  - 4 segments were estimated to have between 30 and 39 years of remaining service life
  - 4 segments were estimated to have over 50 years of remaining service life

Echologics Deliverables:

Draft Report of Pipe Condition Assessment Survey delivered for review and comment on 11/30/2015 and 1/18/2016

- Final Report of Pipe Condition Assessment Survey delivered incorporating MSC Comments on 5/3/2016
- Condition Assessment Survey Data was provided in GIS format that was imported into our mapping system

Lessons Learned:

- All forms of non invasive / non destructive testing involve an inherent level of uncertainty
- Testing and results can be affected by variation from assumed parameters such as pipe type, class, acceptable break rate, year manufactured
- Assessment results can be affected by previous repairs on the mains
- Assessment information is an evaluation of the pipe segment over the entire length surveyed
- Technology is non invasive and requires minimal site/system preparation

- Process requires minimal commitment of Utility resources to complete field work
- Provides a baseline of water main condition
- Assessment information will be used to assist in determining main replacement or rehabilitation
- Data will be a valuable component of our Asset Management Program currently being developed

2017 Infrastructure Projects:

- Utilizing the final report of the Condition Assessment Survey MSC has 3 projects planned to start in March 2017.
- Clean and line 3,800 feet of 1890's 6", 8" and 12" Cast Iron Pipe with 3M Scotchkote 2400 Structural Liner
- Replace 600 feet of 1890's 6" Cast Iron pipe with 6" Ductile Iron Pipe

Jay Guyer thanked Heather Warren and her team for assisting in obtaining and administering the grant, and also thanked the Water Infrastructure Advisory Council for approving the grant.

Terry Deputy presented the following:

Overview
Water Infrastructure Finance and Innovation Act of 2014 (WIFIA)

WIFIA - credit assistance program, direct loans and loan guarantees to states and eligible entities for water infrastructure projects

- January 10, 2017, EPA announced availability of $1 billion in loans, financed by a $20 million FY 2017 Appropriation – Continuing Resolution (CR)
- Designed to provide an alternative source of water infrastructure project financing.
- $2.2 million in FY 2015 and FY 2016 was appropriated for staffing and to prepare the program, FY 2017 CR $20 million ($17 million for loans). The appropriation according to EPA can be leveraged to provide nearly $1 billion in loans.
- December 6, 2016, EPA published an interim final rule implementing WIFIA, and on January 10, 2017, a Notice of Funding Availability.

Eligible Borrowers:

- state, local, tribal, and federal government entities
- corporations and trusts
- partnerships and joint ventures, and
- CWSRF and DWSRF programs

Eligible Projects:

- CWSRF-eligible wastewater projects
- DWSRF-eligible drinking water projects
- Energy efficiency projects at water facilities
- Desalination, aquifer recharge, alternative water supply, and water recycling programs
- Drought prevention, reduction, or mitigation projects, and
- Eligible property acquisition

Project Selection Criteria:

- Projects will be selected by committee, based on 13 evaluation criteria related to project readiness, significance, and financial support. The following requirements also apply:
- $5 million minimum project size for small communities (population =<25,000)
- $20 million minimum project size for large communities
- 35-year maximum final maturity date from substantial completion
- Five-year maximum repayment deferral after substantial completion
- Must be creditworthy (must have or obtain a credit rating) and have a dedicated source of funding
- Loans amount 49% of eligible project costs, total federal assistance cannot exceed 80%.

Program Requirements:

- Davis-Bacon Wage Rates or State Wage Rates (higher of the two, if SRF funds are used)
- American Iron and Steel
- National Environmental Policy Act of 1969 (NEPA)
- Flood Plan Management

Interest Rates:

- Interest rates will be equal to or greater than the yield on U.S. Treasury securities of comparable maturity on the date of execution of the credit agreement

Program Fees:

- Non-refundable fee for each project that is invited to submit a full application, due upon submission of application. For FY 2017, $25,000 for small communities, and $100,000 for all other applicants; loan cannot cover application fee.
- Credit Processing Fees - at the time of loan closing, or in the event that the project does not proceed to closing. EPA estimates these costs in the range of approximately $350,000-$700,000 per project:
    - Financial advisor: $100,000 to $250,000 per project;
    - Law firm: $200,000 to $350,000 per project; and
    - Engineering firm: $50,000 to $100,000 per project.

Program Fees:

- Servicing Fee - EPA expects such fees to range from $12,000 to $15,000 annually per loan
- Other Fees – may also apply such as Extraordinary Expenses, and Optional Supplemental Fee

Next Steps:

- EPA will collect letters of intent until April 10, 2017 followed by a second round of letters beginning August 1, 2017, and ending September 29, 2017, if needed. EPA will invite final applications from borrowers whose proposals are selected for continuation. FY 2017 CR provided a one-time appropriation of $20 million for EPA, to remain available until expended

EPA WIFIA Handbook:

- https://www.epa.gov/sites/production/files/2017-01/documents/program_handbook_1-9-17_final.pdf

Robert Zimmerman who is the Chief Operating Officer of DNREC presented the following:

Updating / Restructuring CWSRF – DWSRF Financing
Incentives with a Customer Focus

Terry Deputy's role within DNREC has been restructured; he will assess all loans that are made by DNREC as to how they are processed and how financial reviews are completed. He will come back with some recommendations and report to the Secretary of DNREC. DNREC would like to make its website more user- friendly so that it lists all of the financial programs that are offered. There will be more detailed information made available online about all of DNREC's financing programs so that a potential applicant will be able to learn about the process on their desktop as opposed to calling a department to get answers. WIAC will offer its input in the future.

Governor Carney should have a budget proposal after the next DEFAC report.

Terry Deputy presented these slides as examples of financing information that is available to borrowers online in the State of Georgia.

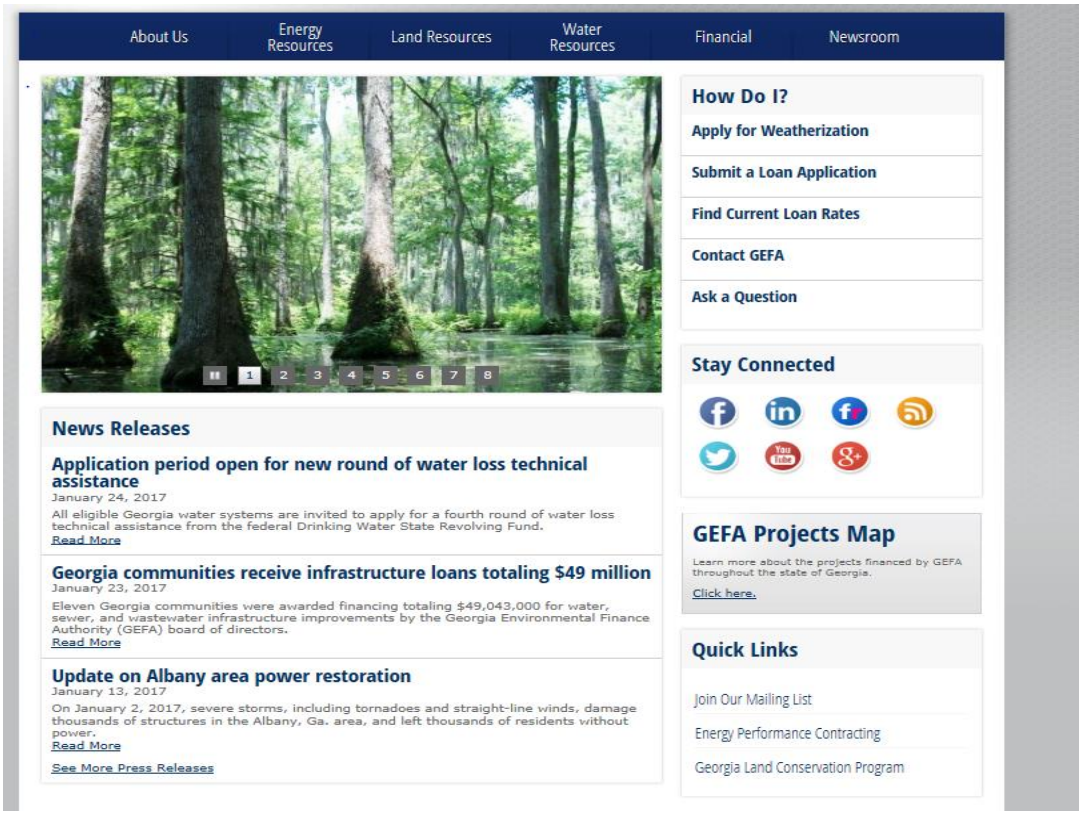

Diagram 1: Potential Water Efficiency and Conservation Projects for Water and Wastewater Utilities

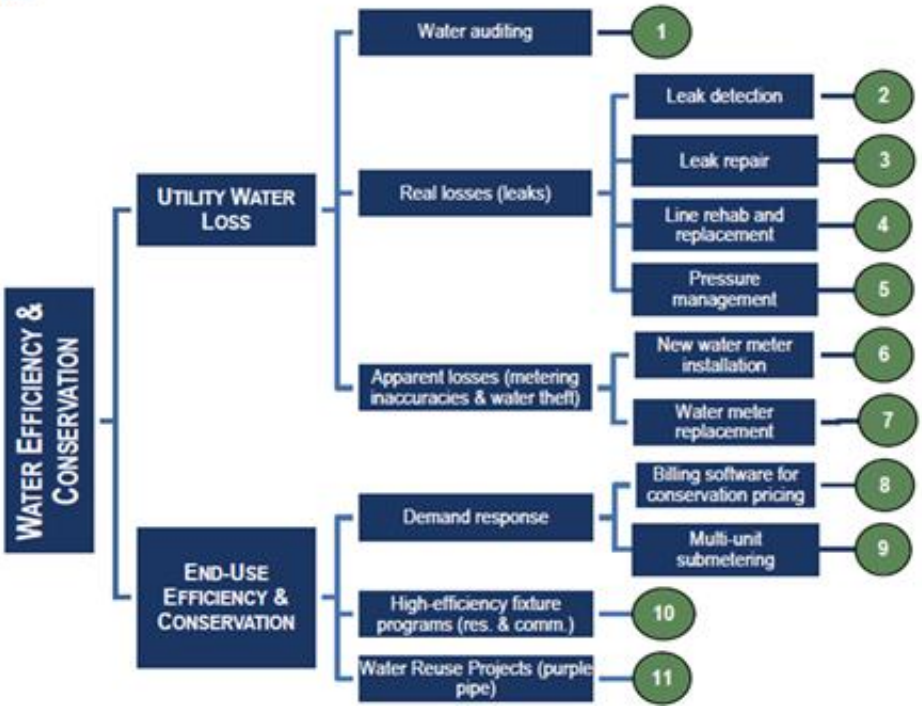

Table 1: Applicable Funding for Potential Water Efficiency and Conservation Projects

1	*Water Auditing* – Auditing is an important first step for utilities to determine their total non-revenue water and the scale of real and apparent water loss in their system.	Water auditing assistance may be financed as part of large construction projects through the Georgia Fund and the Drinking Water SRF.
2	*Leak Detection* – Several practices can help utilities to detect leaks within a water system, such as ultrasonic listening and advanced flow monitoring.	Georgia Fund and the Drinking Water SRF.
3	*Leak Repair* – Leak repairs, such as leaky water line replacement.	Georgia Fund and the Drinking Water SRF.
4	*Line Rehabilitation and Replacement* – Leaks can be avoided by reconditioning or replacing lines before the end of their useful life.	Georgia Fund and the Drinking Water SRF.
5	*Pressure Management* – Since higher pressure can lead to severe leakage, methods such as using pressure reducing valves to regulate water supply pressure in various zones of the water system can reduce water loss.	Georgia Fund and the Drinking Water SRF.
6	*New Water Meter Installation* – Installing water meters at residential or commercial buildings previously without meters.	Georgia Fund and the Drinking Water SRF.
7	*Water Meter Replacement* – Replacing older, inaccurate water meters with new meters.	Georgia Fund and the Drinking Water SRF.
8	*Billing Software Upgrades* – A water utility must sometimes upgrade its billing software to support the implementation of conservation initiatives such as a tiered pricing structure, refining of customer classes, etc.	Billing software upgrades may be financed as part of larger construction projects through the Georgia Fund and the Drinking Water SRF.
9	*Multi-Unit Submetering* – Submetering of individual units in a multifamily building allows customers to get an accurate account of their water use, better guiding their water use behavior.	The Drinking Water SRF and the Georgia Fund can potentially finance submetering in publicly-owned buildings, such as a housing authority complex. The Drinking Water SRF may be able offer financing to a public utility system to provide incentives for multi-unit submetering, depending on certain aspects of program design.
10	*High-efficiency Fixture Programs* – Utilities can provide rebates and other programs to encourage customers to upgrade to high-efficiency fixtures.	Clean Water SRF and Drinking Water SRF, contingent upon approval of local oversight and verification procedures.
11	*Water Reuse Projects (purple pipe)* – Recycling and water reuse projects that displace the use of potable water for such uses as irrigation of golf courses, park areas and other landscaping needs.	Georgia Fund, the Drinking Water SRF and the Clean Water SRF.

NEW BUSINESS:

Doug Lodge presented the following:

DWSRF Loan Requests

Town of Laurel-Well Replacement

Purpose and Need
The well replacement project will involve a new production well replacing the current well. The present well is experiencing operational concerns and higher than usual iron levels.

Environmental Review Office of Engineering
Review of the Environmental Information Document and the environmental checklist, found that there would be no adverse impact due to this project. After the required public notice, a Categorical Exclusion has been issued per the State Environmental Review Procedures.

Capacity Development Review
Based on the review of the technical, managerial, and financial capacities, the Capacity Development Program recommends approval of the loan.

Project Description
Replace a well that is having operational difficulties and levels or iron that are closed to exceeding secondary water standards.

Public Health Benefits: Provide a new and sustainable water source, and meet ten state standards by providing 2 duty wells and one backup.

Project Costs/Budget

Non-Construction:		
Design	$ 43,700	
Bidding	10,000	
Contract Admin	50,000	
Inspection	52,674	
Total Non-Construction		$156,374
Construction:		
Well		500,396
Contingencies		113,230
Total Cost of Project		**$770,000**

Construction Dates
Start Date: February 2018
End Date: November 2018

Robert Burns presented the following:

Affordability Analysis:

Town of Laurel	**Well #7 and Treatment**	**100% Principal Forgiveness**
Estimated Project Cost & Funding Request	$770,000	$0
Drinking Water Utility		
Existing Debt Service*	$176,902	$176,902
Existing OM&R	$340,606	$340,606
Existing Utility Costs	$517,508	$517,508
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)	$29,773	$0
Proposed New OM&R	$16,526	$16,526
Proposed Utility Costs	$46,299	$16,526
Existing and Proposed Utility Costs	$563,807	$534,034
Number of EDUs	1,483	1,483
Residential Share of Utility Costs @ 85%	$479,236	$453,929
Existing and Proposed Utility Costs Per Residential EDU	$323	$306
Wastewater Utility		
Existing Debt Service	$458,644	$458,644
Existing OM&R	$698,986	$698,986
Existing Utility Costs	$1,157,630	$1,157,630
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)	N/A	N/A
Proposed New OM&R	N/A	N/A
Proposed Utility Costs	N/A	N/A
Existing and Proposed Utility Costs	$1,157,630	$1,157,630
Number of EDUs	1,483	1,483
Residential Share of Utility Costs @ 85%	$983,986	$983,986
Existing and Proposed Utility Costs Per Residential EDU	$664	$664
Affordability Analysis		
Median Household Income (MHI)	$33,387	$33,387
% of MHI Drinking Water Utility Costs	**0.97%**	**0.92%**
% of MHI Wastewater Utility Costs	**1.99%**	**1.99%**
% of MHI Combined Utility Costs	**2.96%**	**2.90%**

Loan Terms

- The interest rate will be 2.0% during the construction period. The interest will be payable during the construction period in semi-annual installments.

- There will be 100% principal forgiveness upon completion of the project.

Recommendation

Based on information presented in the Town of Laurel's Drinking Water SRF application, financial review conducted by DNREC, the Department of Health and Social Services, Division of Public Health recommends Council's approval of a DWSRF Binding Loan Commitment in the amount of $770,000 to the Town of Laurel for the Well #7 project. The Town will be required to pay 2% interest during project construction. At the successful completion of the project, 100% of the loan principal shall be forgiven.

Motion made by Mr. Baker, seconded by Mr. Dvornick to approve the Town of Laurel's DWSRF Binding Loan Commitment ($770,000). Motion carried unanimously.

Mr. Baker stated that municipalities should be encouraged to enter into engineering contracts that are

based on actual time and material.

Vice-Chair Medlarz recommended to the Town of Laurel to be diligent in the drilling and development process of the well.

Doug Lodge presented the following:

Town of Delmar-Grove Street Water Main Improvements

Purpose and Need
The project will install a new water system in the Grove Street area located in the Town of Delmar. The current distribution system will be properly abandoned and fire hydrant system will be installed.

Environmental Review Office of Engineering
Review of the Environmental Information Document and the environmental checklist, found that there would be no adverse impact due to this project. A Categorical Exclusion has been issued per the State Environmental Review Procedures.

Capacity Development Review
Based on the review of the technical, managerial, and financial capacities, the Capacity Development Program recommends approval of the loan.

Project Description
The project will entail installing approximately 2000 linear feet of 8 inch water main, valves and fire hydrants along Grove Street in Delmar.

Public Health Benefits:
- Reduced potential for system contamination
- Provide reliable water service
- Provide fire suppression

Project Costs/Budget

Non-Construction:		
Preliminary Eng. Report	$ 10,200	
Design	43,440	
Construction Admin	56,460	
Total Non-Construction		$110,100
Legal		10,000
Construction:		
Main and Apertures		694,260
Contingencies		69,426
Total Cost of Project		**$883,786**

Construction Dates
Start Date: July 2017
End Date: November 2017

Robert Burns presented the following:

Affordability Analysis

Water Main Upgrades	Delmar	$662,400.00 Principal Forgiveness
Estimated Project Cost & Funding Request	$883,786	$221,386
Drinking Water Utility		
Existing Debt Service*	$75,976	$75,976
Existing OM&R	$478,001	$478,001
Existing Utility Costs	$553,977	$553,977
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)	$39,319	$9,849
Proposed New OM&R	$0	$0
Proposed Utility Costs	$39,319	$9,849
Existing and Proposed Utility Costs	$593,296	$563,826
Number of Residential EDUs	612	612
Residential Share of Utility Costs at 96%	$569,564	$541,273
Existing and Proposed Utility Costs Per Residential EDU	$931	$884
Wastewater Utility		
Existing Debt Service	$75,364	$75,364
Existing OM&R	$811,270	$811,270
Existing Utility Costs	$886,634	$886,634
Proposed New Debt Service (Proposed Project Costs @ 2%, 30 years)	N/A	N/A
Proposed New OM&R	N/A	N/A
Proposed Utility Costs	N/A	N/A
Existing and Proposed Utility Costs	$886,634	$886,634
Number of EDUs	602	602
Residential Share of Utility Costs @ per NOI	$851,169	$851,169
Existing and Proposed Utility Costs Per Residential EDU	$1,414	$1,414
Affordability Analysis		
Median Household Income (MHI)	$35,938	$35,938
% of MHI Drinking Water Utility Costs	2.59%	2.46%
% of MHI Wastewater Utility Costs	3.93%	3.93%
% of MHI Combined Utility Costs	6.52%	6.40%

Loan Terms

The Loan is to be secured by a General Obligation Bond.
The interest rate for the loan will be 2% annually.
During construction, the loan will require semi-annual interest only payments.
Upon completion of the project, principal of $662,400 will be forgiven and the remaining balance will be amortized over not more than 30 years with semi-annual principal and interest payments.

Recommendation

Based on information presented in the Town of Delmar's Drinking Water SRF application, and the financial review conducted by DNREC, Environmental Finance; the Department of Health and Social Services, Division of Public Health recommends Council's approval of a DWSRF Binding Commitment in the amount of $883,786 to the Town of Delmar for the improvements to the water mains.

The loan will have a 2% interest rate. Payments will be semi-annual. At the successful completion of the project, $662,400 of the principle will be forgiven with the remainder being amortized over not more than 30 years.

Motion made by Mr. Duncan, seconded by Mr. Dvornick to approve the Town of Delmar's DWSRF Binding Loan Commitment ($883,786). Motion carried unanimously.

Vice-Chair Medlarz requested to Heather Warren that if the Town of Laurel delivers a less than funded

balance that principal loan forgiveness be extended to the Town of Delmar.

Terry Deputy presented the following:

DWSRF NON-FEDERAL ADMINISTRATIVE ACCOUNT-REALLOCATION REQUEST

DWSRF Non Federal Administrative Account (NFAA) -- Current and Proposed Program Uses - Updated for 02/15/17

	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Projected	FY18 Projected	FY19 Projected	FY20 Projected
Revenue Sources							
1. Investment Interest	$21,984	$38,873	$65,547	$66,858	$68,195	$69,559	$70,950
2. Administrative Fee	$1,986,717	$1,501,955	$1,456,805	$1,691,217	$1,725,041	$1,759,542	$1,794,733
Total Annual Revenues	$2,008,701	$1,540,828	$1,522,351	$1,758,075	$1,793,236	$1,829,101	$1,865,683
1. Administrative Expenses and Uses							
Environmental Finance Salaries & Benefits	$100,000	$98,870	$155,311	$148,106	$150,000	$153,000	$156,000
Contractual	$87,942	$101,205	$61,307	$105,304	$100,000	$102,000	$104,000
End of FY Obligations	$107,177	$164,119	$105,304	$100,000	$102,000	$104,000	$106,000
Special Equipment			$150,513	$62,335	$0	$0	$0
End of FY Obligations			$62,335	$0	$0	$0	$0
Total DWSRF Administrative Expenses	$187,942	$200,075	$367,131	$253,410	$250,000	$255,000	$260,000
Total End of FY Administrative Obligations	$107,177	$164,119	$167,639	$100,000	$102,000	$104,000	$106,000
2. DWSRF State Match		$69,000		$1,662,400			
3. Additional Program Expenses							
DWSRF Innovation and Technology Grants			$41,612	$58,387	$150,000	$150,000	$150,000
End of FY Obligations			$58,387	$150,000	$150,000	$150,000	$150,000
Additional Subsidization Program $2,653,500				$5,000	$10,000	$15,000	$20,000
End of FY Obligations				$530,700	$530,700	$530,700	$530,700
DWSRF Asset Mangement Grant			$34,485	$309,160	$500,000	$500,000	$500,000
End of FY Obligations			$309,160	$500,000	$500,000	$500,000	$500,000
Project Planning Advances				$150,000	$300,000	$300,000	$300,000
End of FY Obligations				$300,000	$300,000	$300,000	$300,000
DWSRF Matching Planning Grants		$13,066	$119,822	$89,223	$300,000	$300,000	$300,000
End of FY Obligations		$169,690	$89,223	$300,000	$300,000	$300,000	$300,000
Total Additional Program Expenses	$0	$13,066	$195,919	$611,770	$1,260,000	$1,265,000	$1,270,000
Total End of FY Program Obligations	$0	$169,690	$456,770	$1,780,700	$1,780,700	$1,780,700	$1,780,700
4. Total DWSRF NFAA Expenses	**$187,942**	**$282,141**	**$563,051**	**$2,527,580**	**$1,510,000**	**$1,520,000**	**$1,530,000**
Total DWSRF NFAA End of FY Obligations	**$107,177**	**$333,809**	**$624,409**	**$1,880,700**	**$1,882,700**	**$1,884,700**	**$1,886,700**
Annual Fund Growth / (Decrease)	$1,820,759	$1,258,687	$959,301	($769,505)	$283,236	$309,101	$335,683
End of FY Available Fund Balance	**$8,324,078**	**$9,356,133**	**$10,024,834**	**$7,999,038**	**$8,280,274**	**$8,587,376**	**$8,921,059**
End of FY Accounting Fund Balance	**$8,512,020**	**$9,689,942**	**$10,649,243**	**$9,879,738**	**$10,162,974**	**$10,472,076**	**$10,807,759**
5. Grant Program Uses	**Historical Annual Grant Program Uses**			**Allocated and Future Annual Grant Program Uses**			
DWSRF Innovation and Technology Grants				**$150,000**	**$150,000**	**$150,000**	**$150,000**
Obligated			$99,999	$0			
Additional Subsidization Program $2,653,500				**$530,700**	**$530,700**	**$530,700**	**$530,700**
Obligated				$0	$0	$0	$0
DWSRF Asset Mangement Grant				**$500,000**	**$500,000**	**$500,000**	**$500,000**
Obligated			$698,685	$355,040	$0	$0	$0
Project Planning Advances				**$300,000**	**$300,000**	**$300,000**	**$300,000**
Obligated				$0	$0	$0	$0
DWSRF Matching Planning Grants				**$300,000**	**$300,000**	**$300,000**	**$300,000**
Obligated		$182,756	$82,280	$30,000	$0	$0	$0
Total Proposed Program Uses	$0	$182,756	$880,964	**$1,780,700**	**$1,780,700**	**$1,780,700**	**$1,780,700**

It is recommended that $100,000 be reallocated to the Drinking Water Asset Management Plan Development Incentive Request Program.
Motion made by Mr. Duncan, seconded by Mr. Flynn to approve the $100,000 reallocation. Motion carried unanimously.

Motion amended by Mr. Baker, seconded by Mr. Duncan to approve the $100,000 reallocation from the Drinking Water Project Planning Advances to the Drinking Water Asset Management Plan Development Incentive Request Program. Motion carried unanimously.

Heather Warren presented the following:

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2016 Drinking Water Asset Management Grant Applications

Town of Georgetown

- $ 100,000
- Consultant: KCI Technologies
- Start Date: 12/15/16
- End Date: 12/31/2021

- Deliverables:
    - Asset Database, condition assessment, critical asset ID
    - Asset Management Report
    - Recommendations/Implementation

Town of Selbyville

- $ 100,000
- Consultant: KCI Technologies
- Start Date: 12/15/16
- End Date: 12/31/2021
- Deliverables:
    - Asset Database, condition assessment, critical asset ID
    - Asset Management Report
    - Recommendations/Implementation

Summary

- 4 previously applications totaling $400,000
- 2 application current request totaling $200,000
- $500,000 Current Year Allocation
- $100,000 Additional Allocation Requested

Motion made by Mr. Flynn, seconded by Mr. Anderson to approve the Drinking Water Asset Management Grant applications for the Town of Georgetown ($100,000) and the Town of Selbyville ($100,000). Mr. Duncan and Mr. Dvornick abstained. Motion carried.

Heather Warren introduced Keith Mensch, who is the new program administrator for the Office of Drinking Water beginning Monday, 20 February 2017.

Terry Deputy presented the following:

CWSRF NON-FEDERAL ADMINISTRATIVE ACCOUNT-REALLOCATION REQUEST

CWSRF Non Federal Administrative Account (NFAA), Current and Planned Uses - Updated 02/15/17

	Actual					Projections			
	FY12 Actual	FY13 Actual	FY14 Actual	FY15 Actual	FY16 Actual	FY17 Projected	FY18 Projected	FY19 Projected	FY20 Projected
Revenue Sources									
1. Investment Interest	$49,127	$40,214	$29,003	$30,568	$34,676	$30,000	$25,000	$20,000	$15,000
2. Administrative Fee	$2,035,148	$1,878,287	$1,819,648	$1,914,445	$1,838,070	$1,600,000	$1,700,000	$1,800,000	$1,900,000
3. From DWSRF NFAA			$100,000	$98,870	$155,311	$148,106	$150,000	$153,000	$156,000
4. 1/2 Project Planning Advances Repaid					$0	$0	$0	$0	$0
Total Annual Revenues	$2,084,275	$1,918,501	$1,948,651	$2,043,883	$2,028,057	$1,778,106	$1,875,000	$1,973,000	$2,071,000
Administrative Expenses and Uses									
1. Environmental Finance Admin Expenses	$623,428	$297,933	$492,025	$426,261	$480,782	$500,000	$503,000	$506,000	$509,000
2. Contractual Groundwater Position	$54,112	$52,309	$59,086	$60,157	$64,789	$65,000	$66,000	$67,000	$68,000
3. Contractual Stormwater Position	$60,902	$65,042	$63,957	$66,524	$72,266	$73,000	$74,000	$75,000	$76,000
4. Division of Water Resource Positions	$525,482	$501,663	$531,378	$512,174	$534,483	$537,000	$548,000	$559,000	$570,000
Total Administrative Expenses and Uses	$1,263,924	$916,947	$1,146,446	$1,065,116	$1,152,320	$1,175,000	$1,191,000	$1,207,000	$1,223,000
Total Administrative Obligations To Be Paid	$40,264	$54,552	$11,935	$170,133	$72,322	$100,000	$100,000	$100,000	$100,000
Grant/Program Expenses and Uses									
1. CWSRF 20% State Match	$29,114	$0	$0	$0	$0	$605,000	$0	$0	$0
2. SEFO Program Funding	$150,000	$150,000	$250,000	$250,000	$561,362	$500,000	$375,000	$300,000	$250,000
3. Total Grant Expenses and Uses	$912,567	$672,441	$820,813	$1,177,150	$780,897	$1,000,000	$1,000,000	$1,000,000	$1,000,000
4. Total Special Study Expenses And Uses	$124,454	$27,967	$106,000	$0	$0	$0	$0	$0	$0
Total Grant/Program Expenses and Uses	$1,216,135	$850,408	$1,176,813	$1,427,150	$1,342,259	$2,105,000	$1,375,000	$1,300,000	$1,250,000
Total Grant/Program Obligations To Be Paid	$314,294	$336,684	$288,072	$607,022	$1,207,195	$2,257,000	$2,757,000	$2,857,000	$2,757,000
Total Combined Annual Expenses and Uses	$2,480,059	$1,767,355	$2,323,259	$2,492,266	$2,494,579	$3,280,000	$2,566,000	$2,507,000	$2,473,000
Annual Fund Growth (Decrease)	($395,784)	$151,146	($374,608)	($448,383)	($466,522)	($1,501,894)	($691,000)	($534,000)	($402,000)
Annual Available Fund Balance	$7,772,637	$7,887,106	$7,503,726	$5,980,106	$4,705,911	$2,127,000	$936,000	$302,000	$0
Annual Accounting Fund Balance	$8,127,195	$8,278,342	$7,803,734	$6,757,261	$5,985,428	$4,484,000	$3,793,000	$3,259,000	$2,857,000
	Historical Annual Grant/Program Allocations Approved by WIAC					Projected Annual Grant/Program Allocations			
SEFO Program Obligated	$150,000	$150,000	$150,000	$250,000	$561,362	$500,000 $500,000	$375,000	$300,000	$250,000
Asset Management Planning Grants Obligated					$630,000	$500,000 $500,000	$300,000	$200,000	$200,000
Community Water Quality Grants Obligated	$391,163	$500,000	$350,000	$525,000	$320,241	$350,000 $67,696	$250,000	$200,000	$150,000
Project Planning Advances Obligated					$90,000	$500,000 $0	$400,000	$300,000	$250,000
Wastewater Matching Grants Obligated	$189,384	$137,686	$190,000	$352,967	$183,773	$500,000 $100,000	$400,000	$300,000	$250,000
Surface Water Matching Grants Obligated	$235,100	$171,655	$208,563	$482,250	$267,607	$300,000 $83,531	$250,000	$200,000	$150,000
Statewide Wastewater Study Obligated	$167,180	$124,454	$1,697						
U of D - Land Application Study Obligated		$150,000	$400,000						
Total Proposed Program Uses	$1,132,827	$1,233,795	$1,300,260	$1,610,217	$2,052,983	$2,650,000	$1,975,000	$1,500,000	$1,250,000

Septic System Extended Funding Option (SEFO) Additional Funding Request

SEFO Program

Due-On-Transfer loan program for low-income homeowners to replace failed septic systems; funded from the CWSRF Non-Federal Administrative Account. SEFO program implemented in FY 2000, 175 closed loans totaling $2,478,580

Applicants must first be denied a standard Septic System Rehabilitation (SRLP) Loan (based on loan underwriting criteria) to be considered for a SEFO loan. SRLP program implemented in FY1993, 481 closed loans totaling $8,373,233

$500,000 2016 SEFO Funding Allocation
($327,868) 17 Loans Closed Since 7/1/2017
($127,270) 7 Loans Pending Disbursements
$ 44,862 Balance

Additional Funding Request:
$238,706 13 Pending New Loans @ ~$18,362
$193,844 Additional Funding Request
$693,844 Proposed Total Program Funding

Septic System Rehabilitation Loan Program (SRLP)
$149,556 9 Closed Loans

$132,936 8 Pending Loans

- **SRLP Loan Criteria**

- No more the $2,500 in collections on Credit Bureau
- No Judgements
- No Federal Liens or State Tax Liens
- If the mortgage is delinquent, proof of a repayment plan and reason for delinquency
- Debt to Income ratio must be below 41%.
- Must meet HUD Income Guidelines
- Must be denied for the SRLP Loan Program
- If the mortgage is delinquent, proof of a repayment plan and reason for delinquency
- Must meet HUD Income Guidelines.
- Rental properties do not qualify under the SEFO Loan Program.

Motion made by Mr. Harmer, seconded by Mr. Baker to approve the transfer of funds from the CWSRF Project Planning Advances ($193,844) to the SEFO program. Motion carried unanimously.

Motion made by Mr. Harmer, seconded by Mr. Baker to approve the use of the reallocated funds ($193,844) for the SEFO program. Motion carried unanimously.

Heather Warren presented the following:

Drinking Water Matching Planning Grants

Town of Milton-Wagamon's West Shores Loop

Total Project Cost:	$35,000
Assistance Requested:	**$17,500**
Start Date:	Upon WIAC approval
Completion Date:	**September 30, 2017**
Project Description:	Planning and design specifications for drinking water main loop from Wagamon's West Shores to Federal Street. Project will improve water quality to the development and eliminate a dead-end. Also will improve fire protection and distribution system reliability. Distribution would increase from existing 8" main to a new 10" main.

Motion made by Mr. Dvornick, seconded by Mr. Baker to approve the Town of Milton's Drinking Water Matching Planning Grant ($17,500). Motion carried unanimously.

Greg Pope presented the following:

Wastewater Asset Management Incentive Program

Status Update as of January 2017:

- Received 2 "initial" asset management plans and 3 first year status updates.
  - Town of Millsboro – submitted initial plan in October 2016
  - Town of Smyrna – submitted initial plan in January 2017
  - City of Milford – submitted status update in January 2017
  - Sussex County - submitted status update in January 2017
  - City of Rehoboth Beach - submitted status update in January 2017

- Future updates due from:
  - Town of Clayton – due June 2017
  - New Castle County – due June 2017

Wastewater Asset Management Program Applications

#1 Town of Millsboro

Total Project Cost:	$100,000
Consultant:	CABE/Duffield
Received:	Inventory/location (GIS) has been performed, criticality and Consequence of Failure has been determined, and Remaining Useful life has been analyzed. Computerized Maintenance Management Software (CMMS) has been discussed and presented with associated costs. Long-term funding plan analysis has been performed, including discussion on rates and fee structure
Observations: Well defined asset inventory. Criticality analysis well done. Evaluation of rates and fees completed. Need to develop CIP based on prioritization.	

#2 Town of Smyrna

Total Project Cost:	$60,000
Consultant:	KCI Technologies
Received:	GIS work and training sessions with the Town Asset criticality discussions Capital Improvement Plans have been updated Budget discussions have occurred including discussions on current rates and financial forecasts
Observations: Draft report still under analysis. Noteworthy: CIP presented based on prioritization from condition assessment of assets.	

#3 City of Milford

Total Project Cost:	$70,000
Consultant:	Work done by City engineering staff with assistance from Davis, Bowen, and Friedel (DBF)
Status Update:	Task #1 GIS Database & Master Utility Plan Creation (Ongoing) - The City has purchased and installed hardware and software outlined in the application. The physical assets have been digitized and added to the database based on construction plans and personnel input. Staff is still in the process of verifying location of assets with GPS handheld device and is updating attribute data for each feature. Task #2 Determination of Level of Service (Ongoing) - The City is in the process of developing level of service standards based on regulatory requirements and customer expectations
Observations: Tasks 3-5 (Critical Asset Analysis, Minimum Life Cycle Cost Analysis, and Long Term Funding Plan) have not started yet. City has encountered critical vacancies including City Manager and Public Works Director. Plan to complete plan by October 2017.	

#4 Sussex County

Total Project Cost:	$500,000 ($100,000 incentive)
Consultant:	KCI Technologies
Status Update:	Year 1: County is still working on asset inventory. The County owns and operates a system comprised of over 810 miles of pipe, four major treatment facilities, and over 400 pump stations.
Observations: Sussex County is on track to have a draft plan by end of year 2.	

#5 City of Rehoboth Beach

Total Project Cost:	$161,284 ($100,000 incentive)
Consultant:	GHD
Status Update:	Have completed: 1) Asset inventory of lift stations, wastewater treatment, gravity sewer 17.1 miles, force main sewer 2.8 miles, and 531 manholes. 2) Condition assessment of assets 3) Criticality analysis 100% of facility assets and 75% of buried assets 4) Useful life analysis of assets and 5) Asset life cycle costs 66% complete.
Observations: Still have to do Level of Service analysis, Investment Modeling, Capital Projects, and Asset Management Plan. GHD is planning to submit draft AM plans to the City by 2/17/16.	

Future Asset Management Municipalities:

- City of Seaford
- Town of Selbyville
- Lewes Board of Public Works
- Town of Georgetown
- Town of Harrington
- Kick-off meetings underway

Recommendations to the WIAC:

- Recognize that we are still early in the program implementation process.
- Do not seek out new AM solicitations in FY17 (already awarded the $500K anyway) until more plans are reviewed and the analysis is completed.
- Create an "Asset Management" working group to ensure uniform standards and criteria across wastewater and drinking water asset management plans.

Heather Warren presented the following:

Drinking Water Asset Management Grant Program

ROUND ONE

- Milford
- Millsboro
- Rehoboth
- Smyrna

Kick-Off meetings were held
Annual Updates have been provided

Milford

Obstacles: Staff turn-over including City Manager and Public Works Director

Still targeting final completion date of October 2017 for the Plan

Ongoing activities: digitizing physical assets, and asset location using GIS and developing Level of Service standards

Millsboro

Inventory/location (GIS) has been performed, criticality and Consequence of Failure has been determined, and Remaining Useful life has been analyzed for: Wells, storage tanks, treatment plant, and distribution system.

Computerized Maintenance Management Software (CMMS) has been discussed and presented with associated costs

Long-term funding plan analysis has been performed, including discussion on rates and fee structure

Rehoboth

Completed: Asset inventory on wells, treatment plant, and distribution, condition assessment, facility asset criticality assessment, useful life determinations

On-going: Policy statement, level of service targets, buried asset criticality assessment, asset lifecycle costs,

Up-coming: Investment modeling, capital improvement planning, completion of the AM Plan

Smyrna

On-going: GIS work and training sessions with the Town, asset criticality discussions,
Capital Improvement Plans have been updated
Budget discussions have occurred including discussions on current rates and financial forecasts

Up-coming: Development of outreach efforts; customer inclusion
Development of a Succession Plan
Bridge communication between DPW and decision makers
Electronic Operating Procedures
Update maintenance practices
Review and implementation (where applicable) of Security Plans, Mutual Aid Agreements, and the Emergency Response Plan

ROUND TWO

- Clayton
- Delmar
- Felton
- Magnolia

All Grant Recipients have held Kick-Off meetings, and are in initial phases of GIS/inventory

ROUND THREE

- Bridgeville
- Harrington
- Henlopen Acres
- Lewes Board of Public Works
- City of Seaford

Kick-Off meetings are being scheduled and/or held

REPORTS

ADMINISTRATORS' REPORTS

Greg Pope presented the following:

Project Updates

- Seaford – Solar Array Project
  - Construction – 100% complete
- Sussex County – Angola Sewer District - North Expansion
  - Bid opening – January 2017
- City of Rehoboth Beach – WWTP Capital Improvement Program Upgrade
  - Procurement for long lead time items has begun.
- Division of Parks and Recreation – Lums Pond Improvements Phase II
  - Construction – 84% complete

Terry Deputy presented the following:

CWSRF-DWSRF CASH FLOW

Delaware CWSRF and DWSRF Financial Report
Month Ending - December 31, 2016

		CWSRF (Millions of $)			DWSRF (Millions of $)	
	Sources of Funds	Obligation of Funds	Disbursement of Funds	Sources of Funds	Obligation of Funds	Disbursement of Funds
Actuals Through December 31, 2016						
Source of Funds						
Cap. Grants + State Match - Administrative	$235.373			$182.046		
Transfer of DWSRF Funds + State Match	31.137			(31.529)		
SRF Loan Repayments	143.636			47.251		
NPS Loan Repayments	14.636					
Investment Interest	11.697			2.735		
	436.479			200.503		
Loan Dollars:						
Cap. Grant Loans		$330.668	$302.555		$172.267	$157.215
Non Cap. Grant Loans		16.208	16.208		5.000	5.000
		$346.876	$318.763		$177.267	$162.215
Balance Available for Loans		$89.603	$117.716		$23.236	$38.288
Projected January 1, 2017 through June 30, 2017						
Source of Funds						
FY 2017 Capitalization Grant + State Match - Admin	$0.000			$0.000		
Transfer from CWSRF to DWSRF	As Needed			As Needed		
SRF Loan Repayments	7.698			3.888		
Investment Interest	0.498			0.377		
	$8.196			$4.265		
Loan Dollars						
Cap. Grant & Non Cap Grant Loans		$115.000	$46.261		$20.000	$2.784
NPS Loans		0.372	0.372			
		$115.372	$46.633		$20.000	$2.784
FY 2017 Balance Available for Loans		($107.176)	($38.437)		($15.735)	$1.481
Cumulative Balance Available for Loans		($17.574)	$79.279		$7.501	$39.769

Terry Deputy requested project pictures with a short paragraph for the Bond Bill PowerPoint presentation that Chairman Bross will present at the Bond Bill Hearing on March 2, 2017. Bob Zimmerman encouraged individuals to testify at the Bond Bill Hearing about long-term investment success stories like the Asset Management Program.

SUBCOMMITTEE REPORTS:

Wastewater: None

Surface Water Management: Meeting was cancelled.

Finance: Met on Monday, 30 January 2017. Mr. Dvornick reported that the WIAC presentations were reviewed, and discussed a binding document for the Asset Management Program.

Drinking Water: Mr. Duncan stated that they did not meet, but did review and approve the material presented at today's meeting. The next meeting is in March.

PUBLIC COMMENTS: Marty Presley from the Town of Frankford enquired about the Town of Frankford's Drinking Water Matching Planning Grant Request application that was listed on the WIAC

Agenda. Heather Warren responded that she never received an application from the Town of Frankford.

GOOD OF THE COUNCIL: Mr. Duncan announced that there is a Delaware Rural Water Association Technical Conference and Exhibition on Wednesday, 22 February 2017 and Thursday, 23 February 2017 at the Delaware State Fairgrounds. Mr. Duncan also welcomed the Councilman Marty Presley from the Town of Frankford.

MEETING ADJOURNMENT: Motion made by Mr. Dvornick, seconded by Mr. Duncan to adjourn the meeting. Vice- Chair Medlarz adjourned the meeting at 11:37am. The next WIAC meeting is April 19, 2017 to be held at Kent County Administrative Complex, Conference Room 220, 555 Bay Road, Dover, DE at 9:00am.